

Patient information: High blood pressure in adults (The Basics)

Written by the doctors and editors at UpToDate

What is high blood pressure? — High blood pressure is a condition that puts you at risk for heart attack, stroke, and kidney disease. It does not usually cause symptoms. But it can be serious.

When your doctor or nurse tells you your blood pressure, he or she will say 2 numbers. For instance, your doctor or nurse might say that your blood pressure is "140 over 90." The top number is the pressure inside your arteries when your heart is contracting. The bottom number is the pressure inside your arteries when your heart is relaxed.

The table shows how doctors and nurses define high and normal blood pressure ([table 1](#)).

"Prehypertension" is a term doctors or nurses use as a warning. People with prehypertension do not yet have high blood pressure. But their blood pressure is not as low as it should be for good health.

How can I lower my blood pressure? — If your doctor or nurse has prescribed blood pressure medicine, the most important thing you can do is to take it. If it causes side effects, do not just stop taking it. Instead, talk to your doctor or nurse about the problems it causes. He or she might be able to lower your dose or switch you to another medicine. If cost is a problem, mention that too. He or she might be able to put you on a less expensive medicine. Taking your blood pressure medicine can keep you from having a heart attack or stroke, and it can save your life!

Can I do anything on my own? — You have a lot of control over your blood pressure. To lower it:

- Lose weight (if you are overweight)
- Choose a diet low in fat and rich in fruits, vegetables, and low-fat dairy products
- Reduce the amount of salt you eat
- Do something active for at least 30 minutes a day on most days of the week
- Cut down on alcohol (if you drink more than 2 alcoholic drinks per day)

It's also a good idea to get a home blood pressure meter. People who check their own blood pressure at home do better at keeping it low and can sometimes even reduce the amount of medicine they take.

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[Patient information: High blood pressure emergencies \(The Basics\)](#)

[Patient information: High blood pressure in adults \(Beyond the Basics\)](#)

[Patient information: High blood pressure in children \(Beyond the Basics\)](#)

[Patient information: High blood pressure, diet, and weight \(Beyond the Basics\)](#)

[Patient information: High blood pressure treatment in adults \(Beyond the Basics\)](#)

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GRAPHICS

Definition of normal and high blood pressure

Level	Top number	Bottom number
High	140 or above	90 or above
Prehypertension	120 to 139	80 to 89
Normal	119 or below	79 or below

"Prehypertension" is a term doctor or nurses use as a warning. People with prehypertension do not yet have high blood pressure. But their blood pressure is not as low as it should be for good health.

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HIGH BLOOD PRESSURE OVERVIEW — Hypertension is the medical term for high blood pressure. Blood pressure refers to the pressure that blood applies to the inner walls of the arteries. Arteries carry blood from the heart to other organs and parts of the body.

WHAT IS BLOOD PRESSURE? — An individual's blood pressure is defined by two measurements:

- Systolic pressure is the pressure in the arteries produced when the heart contracts (at the time of a heart beat)
- Diastolic pressure refers the pressure in the arteries during relaxation of the heart between heart beats

Blood pressure is reported as the systolic pressure over diastolic pressure (eg, 120/70 or 120 over 70).

Untreated high blood pressure increases the strain on the heart and arteries, eventually causing organ damage. High blood pressure increases the risk of heart failure, heart attack (myocardial infarction), stroke, and kidney failure.

HIGH BLOOD PRESSURE DEFINITION

Normal blood pressure — Less than 120 over less than 80

Prehypertension — 121 to 139 over 81 to 89

People with prehypertension are at increased risk of developing hypertension and cardiovascular complications, but drugs used to lower blood pressure are not known to be beneficial in people with prehypertension.

Hypertension

Stage 1: 140 to 159 over 90 to 99

Stage 2: greater than 160 over greater than 100

Most adults with hypertension have primary hypertension (formerly called "essential" hypertension), which means that the cause of the high blood pressure is not known. A small subset of adults has secondary hypertension, which means that there is an underlying and potentially correctable cause, usually a kidney or hormonal disorder.

HIGH BLOOD PRESSURE RISK FACTORS — Hypertension is a common health problem. In the United States, approximately 32 percent of African Americans and 23 percent of white people and Mexican Americans have hypertension.

Hypertension is more common as people grow older. As an example, among people over age 60 years, hypertension occurs in 65 percent of African-American men, 80 percent of African-American women, 55 percent of white men, and 65 percent of white women.

Unfortunately, many people's blood pressure is not well controlled. According to a national survey, hypertension was in good control in only 25 percent of African Americans and whites and 14 percent of Mexican Americans.

HIGH BLOOD PRESSURE SYMPTOMS — High blood pressure does not usually cause any symptoms.

HIGH BLOOD PRESSURE DIAGNOSIS — Many people are anxious when seeing a doctor or nurse. As a result, you are not diagnosed with hypertension unless your blood pressure is persistently high at two office visits at least one week apart.

The only exceptions to this are if the blood pressure is very high or if you have damage from high blood pressure, such as heart, eye, or kidney injury. Before a decision is made to begin treatment, you may be asked to measure your blood pressure at home or work.

HIGH BLOOD PRESSURE TREATMENT — Untreated hypertension can lead to a variety of complications, including heart disease and stroke. The risk of these complications increases as your blood pressure rises above 110/75, which is still in the healthy range. Treating high blood pressure can reduce your risk of heart attack, stroke, and death.

Lifestyle changes — Treatment of hypertension usually begins with lifestyle changes. Making these lifestyle changes involves little or no risk. Recommended changes often include:

- Reduce the amount of salt in your diet
- Lose weight if you are overweight or obese
- Avoid drinking too much alcohol
- Stop smoking
- Exercise at least 30 minutes per day most days of the week

These changes are discussed in detail in a separate article. (See "[Patient information: High blood pressure, diet, and weight \(Beyond the Basics\)](#)".)

Medicine — A medicine to lower blood pressure may be recommended if your blood pressure is consistently high, usually at or above 140/90 (or above 150/90 in older people). Treatment with medicine is recommended at a lower blood pressure for some people with atherosclerosis (fatty deposits lining the arteries, as in coronary heart disease, stroke, or peripheral artery disease), or chronic kidney disease complicated by protein in the urine. (See "[Patient information: Diabetes mellitus type 1: Overview \(Beyond the Basics\)](#)" and "[Patient information: Diabetes mellitus type 2: Overview \(Beyond the Basics\)](#)" and "[Patient information: Chronic kidney disease \(Beyond the Basics\)](#)".)

High blood pressure medicines are discussed in a separate article. (See "[Patient information: High blood pressure treatment in adults \(Beyond the Basics\)](#)".)

WHERE TO GET MORE INFORMATION — Your healthcare provider is the best source of information for questions and concerns related to your medical problem.